Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start		Rating **	Α	Issue No.		3	
LM End		Issue Type +	Ma	Location *			
Category Earthen Levee			GPS La	atitude/	Longitude		
Calegory				Start		End	
Item		s & Maintena	nce		0		0
пеш	Manuals			0			0
DWR ID DWR_RD2098_01_f _ 2014_3							
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
RD 2098 Has on file O+M Manual.							

No Photos

LM Start		Rating **	Α	Issue No.		4	
LM End		Issue Type +	Ma	Location *			
Category Earthen Levee			GPS La	atitud	le/Longitude		
Category				Start		End	
Item	Emergency Supplies &				0		c
item	Equipmen	nt			٥		c
DWR ID	DWR_RD2	098_01_f _ 201	4_4				
		Comn	nent Cod	de			

Inspector Comment

RD 2098 Has Emergency Supplies in storage along with Equipment.

No Photos

LM Start		Rating **	Α	Issue No.		5	
LM End		Issue Type +	Ма	Location *			
Category Earthen Levee			GPS Latitude/Longitude				
				Start		End	
Item	Flood Pre	paredness &	Training		0		0
itom					0		0
DWR ID	DWR_RD2	098_01_f _ 201	4_5				
		Comn	nent Cod	le			
			-				_
		Inspecto	or Comm	ient			
RD 2098 F	las their te	am well prepa	ared for F	Flood Fight.			

No Photos

* Location

LS: Land Side N/A: Not Applicable
WS: Water Side

e A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	0.07	Rating **	М	Issue No.		22
LM End	0.67	Issue Type +	Ма	Location *	WS	
Earthen Levee			GPS Latitude/Longitude			
Calegory	Category					End
Item	/egetation			38.3281	25 °	38.319367°
пеш	item			-121.694047 °		-121.694040°
DWR ID	DWR_RD2	098_01_f _ 201	8_22			
		Comn	nent Cod	de		
V1 : Control annual grass and weeds on the levee slopes and easements.						
	Inspector Comment					
Manage ve	egetation o	n the water si	de slope).		

Photo 1 of 1 : FA_2018_RD2098_244_22_20181019_00060.jpg



View of vegetation on the water side slope. The vegetation is spread enough that can still see the levee but is thick enough that it should be removed (October 2018).

LM Start	0.07	Rating **	М	Issue No.		16	
LM End	1.01	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS L	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio		38.3281	25°	38.314483°		
item				-121.694047 °		-121.694012°	
DWR ID DWR_RD2098_01_f _ 2018_16							
		Comn	nent Cod	de			
V1 : Contre		grass and wee	eds on th	e levee slo	pes a	and	
		Inspecto	or Comm	nent			
Remove vegetation on the land side slope.							



View looking upstream at vegetation on the land side slope. Vegetation is spaced enough that still can partially see the levee slope but still should be removed (October 2018).

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	0.57	Rating **	М	Issue No.		13
LM End	1.06	Issue Type +	Ma	Location *		WS
Earthen Levee				GPS La	atitud	e/Longitude
Category				Start		End
Item	Erosion /		38.3207	'55 °	38.313700°	
пеш				-121.6939	82°	-121.693639°
DWR ID DWR_RD2098_01_s _ 2017_13						
		Comn	nent Cod	de		
E2 : Sched	dule repair	of erosion sit	e prior to	the next in	spec	ction.
		Inspect	or Comm	nent		



Monitor and repair erosion on waterside.

LM Start	0.75	Rating **	М	Issue No.	23			
LM End	1.01	Issue Type +	Ma	Location *		WS		
Category Earthen Levee			GPS Latitude/Longitude					
Category				Start	End			
Vegetation Item			38.318148°		38.314483°			
пеш				-121.6940	22 °	-121.694000°		
DWR ID	DWR ID DWR_RD2098_01_f _ 2018_23							
	Comment Code							

V1: Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

A/W : Acceptable but Monitor & Maintain

Page 4 of 25

Flood Control Project Maintenance Levee Inspections

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	0.96	Rating **	A/W	Issue No.		19	
LM End	0.96	Issue Type +	Ma	Location *			
Category			GPS Latitude/Longitude				
Calegory	Category			Start	End		
Item	2017 Stor	m Damage		38.3152	00°	38.315100°	
пеш				-121.6941	00°	-121.694100 °	
DWR ID DWR_RD2098_01_s _ 2018_19							
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of cracking and sloughing of the

lower landside levee slope.

Site ID No:414

Site Designation:LMA-241 Repair Type: Erosion Rating: Area of Concern Field Date:7/24/2017

Notes: Landside sloughing about 2' deep and extends to toe ditch.

LM Start	0.96	Rating **	A/W	Issue No.	19 (cont)
LM End	0.96	Issue Type +	Ma	Location *	







LS: Land Side WS: Water Side A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	0.96	Rating **	A/W	Issue No.		19 (cont)
LM End	0.96	Issue Type +	Ma	Location *		
Category			GPS Latitude/Longitude			
Calegory				Start		End
Item	2017 Stor	2017 Storm Damage			00°	38.315100°
пеш				-121.6941	00°	-121.694100 °
DWR ID	DWR_RD2	8_19				
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of cracking and sloughing of the

lower landside levee slope.

Site ID No:414

Site Designation:LMA-241 Repair Type: Erosion Rating: Area of Concern Field Date:7/24/2017

Notes: Landside sloughing about 2' deep and extends to toe ditch.



LM Start	1.06	Rating **	М	Issue No.		24			
LM End	1.64	Issue Type +	Ma	Location *		LS			
Category Earthen Levee				GPS La	titud	e/Longitude			
Calegory				Start		End			
Item	Vegetation			38.3137	02°	38.305367	0		
пеш				-121.6936	57°	-121.693648	0		
DWR ID	DWR ID DWR_RD2098_01_f _ 2018_24								
Comment Code									
V/4 . O t -			de en de						

V1: Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	1.55	Rating **	М	Issue No.	14			
LM End	1.55	Issue Type +	Ма	Location *	LS			
Cotogony	evee	GPS La	atitud	le/Longitude				
Category				Start		End		
Item	Trim / Thi	n Trees	38.306628 °		38.306628°			
пеш			-121.693632 °		-121.693632°			
DWR ID	DWR_RD2	098_01_f _ 201	8_14					
		Comn	nent Cod	de				
T1: Trim t	rees to at l	east five feet	above g	round level.				
Inspector Comment								

Inspector Comment

Trim and thin trees to allow inspection and access to landside slope and toe. Also, remove fallen tree on landside slope.



Remove fallen tree and trim remaining trees.

LM Start	1.76	Rating **	М	Issue No.		18	
LM End	1.76	Issue Type +	Ma	Location *	WS		
Category	evee	GPS Latitude/Longitude					
Calegory				Start		End	
Item	Erosion / Bank Caving			38.3036	11 °	38.303611°	
пеш				-121.6936	07°	-121.693607°	
DWR ID	DWR_RD2	8_18					
Comment Code							

E2 : Schedule repair of erosion site prior to the next inspection.

Inspector Comment



Monitor and repair erosion.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	1.82	Rating **	М	Issue No.		41	
LM End	1.82	Issue Type +	Ма	Location *			
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UC	DWR UCIP LMA Responsibility			70°	38.302770°	
пеш				-121.6936	40°	-121.693640°	
DWR ID	20965						
Comment Code							

Inspector Comment

FS_ID:32197 DS_ID:20965 EP_NO: 10168

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 12/22/2016 Met with Mike Hadesty, LMA

Superintendent, and Brian Bush, LMA General Manager, to go over the list of pipes in RD2098. Per LMA records, this pipe has a different

owner. (O. Magana - DWR UCIP)

03/18/2014 Erosion under pipe at WS toe. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 10-inch steel drainage pipe through the levee, 2.8 feet below the crown. Pump in pump house off the landside (LS). (This pipe was retained under Automatic Board Order (ABO) issued as Permit No. 10168, 1974 - Moresco Brothers). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 1.80)].

FS Date: 3/18/2014

LM Start	1.82	Rating **	М	Issue No.	41 (cont)
LM End	1.82	Issue Type +	Ma	Location *	



Pipe on WS slope.

Photo 2 of 3: UCIP_FA_2018_32197_58661.jpg



Pumphouse at lowpoint off LS toe.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	1.82	Rating **	М	Issue No.		41 (cont)	
LM End	1.82	Issue Type +	Ma	Location *			
Catagony	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	onsibility	38.30277	o°	38.302770	٥
пеш				-121.69364	o°	-121.693640	0
DWR ID	20965						

Inspector Comment

Comment Code

FS ID:32197 DS_ID:20965 EP_NO: 10168

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 12/22/2016 Met with Mike Hadesty, LMA

Superintendent, and Brian Bush, LMA General Manager, to go over the list of pipes in RD2098. Per LMA records, this pipe has a different

owner. (O. Magana - DWR UCIP)

03/18/2014 Erosion under pipe at WS toe. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 10-inch steel drainage pipe through the levee, 2.8 feet below the crown. Pump in pump house off the landside (LS). (This pipe was retained under Automatic Board Order (ABO) issued as Permit No. 10168, 1974 - Moresco Brothers). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 1.80)].

FS Date: 3/18/2014



Erosion under pipe at WS toe.

LM Start	2.20	Rating **	A/W	Issue No.		15			
LM End	2.24	Issue Type +	Ma	Location *		WS			
Category	GPS Latitude/Longitude								
Calegory	Category					End			
Item		CE Erosion S	Survey,	38.2972	32°	38.296678	0		
пеш	DRAFT			-121.6932	00°	-121.693223	0		
DWR ID DWR_RD2098_01_f _ 2018_15									
Comment Code									

Inspector Comment

2017 Site ID: YOL 2.2 R Status: Eroding New

2017 Field Notes: POTENTIALLY UNDER REPAIR; full landslide from levee crown down, revetment failure, additional slumping ds and slump

cracks observed. Site History:

No Photos

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy A/W : Acceptable but Monitor & Maintain

Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	2.21	Rating **	A/W	Issue No.		21	_	
LM End	2.22	Issue Type +	Ma	Location *				
Category	Suppleme	ental	GPS Latitude/Longitude					
Category				Start		End		
Item	2017 Stor	m Damage		38.29710	00°	38.297000	0	
пеш				-121.69330	00°	-121.693300	٥	
DWR ID DWR_RD2098_01_s _ 2018_21								
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of erosion, cracking, and sloughing of the waterside levee slope.

Site ID No:416

Site Designation:LMA-243

Repair Type: Erosion Rating:Serious Field Date:7/24/2017

Notes: Erosion with sloughing. About 2' vertical cut at top of erosion.

LM Start	2.21	Rating **	A/W	Issue No.	21 (cont)
LM End	2.22	Issue Type +	Ma	Location *	



Photo 2 of 3: LEVAL_FA_2018_416_2727.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	2.21	Rating **	A/W	Issue No.	21 (cont)				
LM End	2.22	Issue Type +	Ма	Location *					
Category	Suppleme	ental	GPS Latitude/Longitude						
Calegory		Start		End					
Item	2017 Stor	m Damage		38.297100 °		38.297000°			
пеш				-121.6933	00°	-121.693300°			
DWR ID DWR_RD2098_01_s _ 2018_21									
	Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of erosion, cracking, and sloughing of

the waterside levee slope.

Site ID No:416

Site Designation:LMA-243 Repair Type: Erosion Rating:Serious Field Date:7/24/2017

Notes: Erosion with sloughing. About 2' vertical cut at top of erosion.



LM Start	2.29	Rating **	A/W	Issue No.		27		
LM End	2.31	Issue Type +	Ма	Location *				
Category	ental	GPS Latitude/Longitude						
Calegory			Start		End			
Item	2017 Storm Damage			38.2959	00°	38.295700°		
пеш			-121.6935	00°	-121.693500°			
DWR ID DWR_RD2098_01_f _ 2017_27								
Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the

waterside levee slope.

Site ID No:421

Site Designation:LMA-248

Repair Type: Erosion Rating:Serious Field Date:7/24/2017

Notes: Toe of slope has eroded and minor sloughing has started.

Photo 1 of 3: FA_2018_RD2098_244_27_20180925_00012.jpg



N/A: Not Applicable LS: Land Side WS: Water Side

: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	2.29	Rating **	A/W	Issue No.	27 (cont)		
LM End	2.31	Issue Type +	Ma	Location *			
Category	Suppleme	ental	GPS La	atitud	le/Longitude		
Calegory		Start		End			
Item	2017 Stor	m Damage		38.2959	00°	38.295700°	
пеш				-121.6935	00°	-121.693500°	
DWR ID DWR_RD2098_01_f _ 2017_27							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the

waterside levee slope.

Site ID No:421

Site Designation:LMA-248

Repair Type: Erosion Rating:Serious Field Date:7/24/2017

Notes: Toe of slope has eroded and minor sloughing has started.

LM Start	2.29	Rating **	A/W	Issue No.	27 (cont)
LM End	2.31	Issue Type +	Ma	Location *	

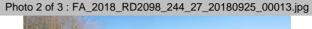




Photo 3 of 3: FA_2018_RD2098_244_27_20180925_00014.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	2.30	Rating **	A/W	Issue No.		20		
LM End	2.32	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Erosion / I	Bank Caving		38.2958	70°	38.295430 °		
пеш				-121.6936	45 °	-121.693628°		
DWR ID	DWR_RD2	098_01_s _ 201	7_20					
		Comn	nent Cod	de				
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spec	ction.		
		Inspecto	or Comm	nent				
Repair the erosion site listed.								

No Photos

LM Start	2.35	Rating **	A/W	Issue No.	28	
LM End	2.39	Issue Type +	Ma	Location *		
Supplemental			GPS Latitude/Longitude			
Category				Start		End
Item	2017 Stor	m Damage		38.2951	00°	38.294500°
item				-121.6934	00°	-121.693400°
DWR ID DWR_RD2098_01_f _ 2017_28						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour, sloughing, and cracking of the lower and mid waterside levee slope.

Site ID No:423

Site Designation:LMA-250 Repair Type: Erosion Rating: Area of Concern Field Date:7/24/2017

Notes: 2' of sloughing about half way up the slope.

Photo 1 of 3: FA_2018_RD2098_244_28_20180925_00015.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	2.35	Rating **	A/W	Issue No. 28 (cont)		28 (cont)	
LM End	2.39	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Stor	m Damage		38.2951	00°	38.294500°	
item			-121.693400				
DWR ID DWR_RD2098_01_f _ 2017_28							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour, sloughing, and cracking of the lower and mid waterside levee slope.

Site ID No:423

Site Designation:LMA-250 Repair Type: Erosion Rating: Area of Concern Field Date:7/24/2017

Notes: 2' of sloughing about half way up the slope.

LM Start	2.35	Rating **	A/W	Issue No.	28 (cont)
LM End	2.39	Issue Type +	Ma	Location *	

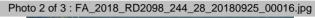




Photo 3 of 3: FA_2018_RD2098_244_28_20180925_00017.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	2.75	Rating **	A/W	Issue No.		34	
LM End	2.78	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Stor	m Damage		38.2892	° 00	38.288800°	
пеш			-121.693500° -121.69				
DWR ID DWR_RD2098_01_f _ 2017_34							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the

waterside levee slope.

Site ID No:429

Site Designation:LMA-256

Repair Type: Erosion Rating:Serious Field Date:7/25/2017

Notes: Erosion at WS toe, causing sloughing half-way down WS slope.

LM Start	2.75	Rating **	A/W	Issue No.	34 (cont)
LM End	2.78	Issue Type +	Ma	Location *	

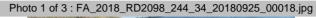




Photo 2 of 3: FA_2018_RD2098_244_34_20180925_00019.jpg



A/W : Acceptable but Monitor & Maintain

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	2.75	Rating **	A/W	Issue No.	34 (cont)	
LM End	2.78	Issue Type +	Ma	Location *		
Category	Suppleme	ental	GPS Latitude/Longitude			
Calegory				Start		End
Item	2017 Stor	m Damage		38.2892	00°	38.288800°
пеш				-121.6935	00°	-121.693500°
DWR ID DWR_RD2098_01_f _ 2017_34						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the

waterside levee slope.

Site ID No:429

Site Designation:LMA-256 Repair Type: Erosion Rating:Serious

Field Date:7/25/2017

Notes: Erosion at WS toe, causing sloughing half-way down WS slope.



LM Start	2.78	Rating **	A/W	Issue No.		35
LM End	2.81	Issue Type +	Ма	Location *		
Supplemental			GPS Latitude/Longitude			
Category				Start	End	
Item	2017 Stor	m Damage		38.2888	00°	38.288400°
item				-121.6935	00°	-121.693500°
DWR ID DWR_RD2098_01_f _ 2017_35						
Comment Code						

Inspector Comment

Levee Evaluation Comments

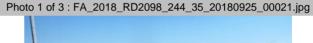
Description: The damage consists of scour and sloughing of the

waterside levee slope.

Site ID No:430

Site Designation:LMA-257 Repair Type: Erosion Rating:Serious Field Date:7/25/2017

Notes: Erosion at waterside toe, causing sloughing 2/3 down waterside





N/A: Not Applicable LS: Land Side

WS: Water Side

: Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	2.78	Rating **	A/W	Issue No.	35 (cont)	
LM End	2.81	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Latitude/Lon		
Category				Start	End	
Item	2017 Stor	m Damage		38.2888	00°	38.288400°
пеш				-121.6935	00°	-121.693500°
DWR ID DWR_RD2098_01_f _ 2017_35						
	Comment Code					

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the

waterside levee slope.

Site ID No:430

Site Designation:LMA-257

Repair Type: Erosion Rating:Serious

Field Date:7/25/2017

Notes: Erosion at waterside toe, causing sloughing 2/3 down waterside

slope.

LM Start	2.78	Rating **	A/W	Issue No.	35 (cont)
LM End	2.81	Issue Type +	Ma	Location *	

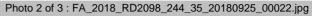




Photo 3 of 3: FA_2018_RD2098_244_35_20180925_00023.jpg



N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	2.80	Rating **	М	Issue No.	11	
LM End	2.97	Issue Type +	Ма	Location *	WS	
Category	evee	GPS Latitude/Longitude				
Calegory	Start E				End	
Item	Vegetatio	n		38.28859	90°	38.286013°
пеш				-121.69364	45 °	-121.693632°
DWR ID	WR ID DWR_RD2098_01_f _ 2017_11					
Comment Code						

 $\ensuremath{\text{V2}}$: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Nearby construction opertions forced termination of goat grazing. Vegetation should be cleared.



Nearby construction opertions forced termination of goat grazing.

Vegetation should be cleared.

LM Start	2.80	Rating **	М	Issue No.	12			
LM End	3.60	Issue Type +	Ма	Location *		LS		
Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End		
Item	Vegetatio	n		38.2885	90°	38.277458°		
item				-121.6936	45 °	-121.696303°		
DWR ID DWR_RD2098_01_f _ 2017_12						·		

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Nearby construction opertions forced termination of goat grazing. Vegetation should be cleared.

Photo 1 of 1: FA_2018_RD2098_244_12_20180925_00002.jpg



Nearby construction opertions forced termination of goat grazing.

Vegetation should be cleared.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	2.91	Rating **	A/W	Issue No.	36		
LM End	2.93	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory		Start E				End	
Item	2017 Stor	m Damage		38.2869	00°	38.286700°	
item				-121.6935	00°	-121.693500°	
DWR ID DWR_RD2098_01_f _ 2017_36							
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the

waterside levee slope.

Site ID No:431

Site Designation:LMA-258

Repair Type: Erosion Rating:Serious

Field Date:7/25/2017 Notes: Erosion of WS toe, resulting in 8' verticle wall.

LM Start	2.91	Rating **	A/W	Issue No.	36 (cont)
LM End	2.93	Issue Type +	Ma	Location *	





Photo 2 of 3: FA_2018_RD2098_244_36_20180925_00025.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	2.91	Rating **	A/W	Issue No.	36 (cont)		
LM End	2.93	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory			Start End				
Item	2017 Stor	m Damage		38.2869	00°	38.286700°	
пеш				-121.6935	00°	-121.693500 °	
DWR ID DWR_RD2098_01_f _ 2017_36							
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the

waterside levee slope.

Site ID No:431

Site Designation:LMA-258 Repair Type: Erosion Rating:Serious

Field Date:7/25/2017

Notes: Erosion of WS toe, resulting in 8' verticle wall.



LM Start	2.99	Rating **	A/W	Issue No.	37	
LM End	3.29	Issue Type +	Ма	Location *		
Category Supplemental				GPS La	atitud	le/Longitude
				Start		End
Item	2017 Stor	m Damage		38.2857	00°	38.281500°
item				-121.6935	00°	-121.694300 °
DWR ID DWR_RD2098_01_f _ 2017_37						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the

waterside levee slope.

Site ID No:432

Site Designation:LMA-259 Repair Type: Erosion Rating:Serious Field Date:7/25/2017

Notes: Varying erosion and sloughing at WS toe. Revetment at end of

levee section.



N/A: Not Applicable LS: Land Side

WS: Water Side

: Acceptable

Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	2.99	Rating **	A/W	Issue No.	37 (cont)			
LM End	3.29	Issue Type +	Ма	Location *				
Category	Suppleme	upplemental			GPS Latitude/Longitude			
Category				Start	End			
Item	2017 Stor	m Damage		38.28570	00°	38.281500°		
пеш				-121.69350	00°	-121.694300°		
DWR ID	DWR ID DWR_RD2098_01_f _ 2017_37							
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:The damage consists of scour and sloughing of the

waterside levee slope.

Site ID No:432

Site Designation:LMA-259

Repair Type: Erosion

Rating:Serious Field Date:7/25/2017

Notes: Varying erosion and sloughing at WS toe. Revetment at end of

levee section.

LM Start	2.99	Rating **	A/W	Issue No.	37 (cont)
LM End	3.29	Issue Type +	Ма	Location *	

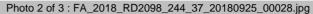




Photo 3 of 3: FA_2018_RD2098_244_37_20180925_00029.jpg



Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	3.15	Rating **	С	Issue No.		38
LM End	3.15	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Category				Start		End
Item	2017 Stor	m Damage		38.283472	2°	38.283472°
пеш				-121.693600	°	-121.693600°
DWR ID	DWR_RD2	098_01_f _ 201	7_38			·

No Photos

Inspector Comment

Comment Code

Levee Evaluation Comments

Description: Site ID No:115

Site Designation:DWR_RD2098_01_s_2012_12

Repair Type: Erosion Rating:Critical Field Date:6/9/2017

Notes: noticable sloughing along Wsslope for entire levee reach

10/26/17: Dutra has repaired erosion at 3.12-3.14.

LM Start	3.18	Rating **	М	Issue No.		17	
LM End	3.60	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Category				Start		End	
Item	Vegetation			38.2830	35°	38.277458°	
пеш				-121.693617°		-121.696303°	
DWR ID	DWR ID DWR_RD2098_01_f _ 2017_17						
Comment Code							

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	3.31	Rating **	A/W	Issue No.	39		
LM End	3.32	Issue Type +	Ма	Location *			
Category			GPS Latitude/Longitude				
Calegory				Start		End	
ltom	2017 Stor	2017 Storm Damage			00°	38.281100°	
пеш	Item			-121.694500 °		-121.694600°	
DWR ID DWR_RD2098_01_f _ 2017_39							
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description:The damage consists of scour and sloughing of the lower waterside levee slope.

Site ID No:433

Site Designation:LMA-260

Repair Type: Erosion Rating:Area of Concern

Field Date:7/25/2017

Notes: Two combined erosion sites (260 and 261) adjacent to each other at WS toe. Existing rip rap placed at area of concern.

LM Start	3.31	Rating **	A/W	Issue No.	39 (cont)
LM End	3.32	Issue Type +	Ma	Location *	

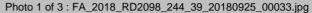




Photo 2 of 3: FA_2018_RD2098_244_39_20180925_00034.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	3.31	Rating **	A/W	Issue No.	39 (cont)	
LM End	3.32	Issue Type +	Ma	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category			Start		End
Itom	2017 Storm Damage			38.2812	00°	38.281100°
пеш	Item			-121.694500°		-121.694600 °
DWR ID DWR_RD2098_01_f _ 2017_39						
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the lower waterside levee slope.

Site ID No:433

Site Designation:LMA-260

Repair Type: Erosion Rating: Area of Concern

Field Date:7/25/2017

Notes: Two combined erosion sites (260 and 261) adjacent to each

other at WS toe. Existing rip rap placed at area of concern.

Photo 3 of 3 : FA_2018_RD2	2098_244_39_20180925_00035.jpg
文学	

LM Start	3.44	Rating **	М	Issue No.		25		
LM End	3.59	Issue Type +	Ма	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Category			Start		End			
Item	Vegetatio	Vegetation			55°	38.277490	0	
Item				-121.69558	38°	-121.696253	0	
DWR ID	DWR_RD2	098_01_f _ 201	8_25					
		Comn	nent Cod	le				
\/4 \ O = = 1 =	. 1		de ee de					

V1: Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

A/W : Acceptable but Monitor & Maintain

Page 24 of 25

Flood Control Project Maintenance Levee Inspections

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	3.50	Rating **	М	Issue No.		40
LM End	3.56	Issue Type +	Ма	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory				Start End		
Item	2017 Stor	m Damage		38.2787	00°	38.278000°
item				-121.6959	00°	-121.696100°
DWR ID	DWR_RD2098_01_f _ 2017_40					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the lower and mid waterside levee slope.

Site ID No:435

Site Designation:LMA-262

Repair Type: Erosion Rating:Area of Concern

Field Date:7/25/2017

Notes: Two combined sloughing sites adjacent to each other on lower waterside slope. Existing rip rap on beginning 100' section of site 262. This site is combined with site 263.

LM Start	3.50	Rating **	М	Issue No.	40 (cont)
LM End	3.56	Issue Type +	Ма	Location *	

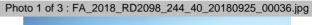




Photo 2 of 3: FA_2018_RD2098_244_40_20180925_00037.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Yolo Bypass	Right	3.60	10/18/2018 10/18/2018	David Julian

LM Start	3.50	Rating **	М	Issue No.	40 (cont)	
LM End	3.56	Issue Type +	Ма	Location *		
Category	ental	GPS Latitude/Longitude				
Category				Start		End
Item	2017 Stor	m Damage		38.2787	00°	38.278000°
пеш				-121.6959	00°	-121.696100°
DWR ID DWR_RD2098_01_f _ 2017_40						
	Comment Code					

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the lower and mid waterside levee slope.

Site ID No:435

Site Designation:LMA-262

Repair Type: Erosion Rating:Area of Concern

Field Date:7/25/2017

Notes: Two combined sloughing sites adjacent to each other on lower waterside slope. Existing rip rap on beginning 100' section of site 262.

This site is combined with site 263.



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01A Cross Levee	Right	0.53	10/18/2018 10/18/2018	David Julian

LM Start	0.00	Rating **	M	Issue No.		1
LM End	0.52	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Vegetatio	า		38.2773	82°	38.275722°
пеш				-121.6962	70°	-121.705675°
DWR ID DWR_RD2098_01A_s _ 2017_1						
		Comn	nent Cod	de		
V2 : Remo	ove the wild	growth other	than na	tive grasse	s fro	m the levee
		Inspecto	or Comm	nent		
Remove the wild grasses other than native from the levee slope.						



RD 2098 1A Looking upstream from levee mile 0.00-0.52 landside slope.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	5.30	Rating **	М	Issue No.		9
LM End	5.56	Issue Type +	Ма	Location *		WS
Catagoria Earthen Levee				GPS Latitude/Longitude		
Category				Start		End
Item	Vegetatio	n		38.2757	57°	38.278863 °
пеш				-121.7058	18°	-121.708687°
DWR ID DWR_RD2098_02_s _ 2017_9						·
	DWR_RD2	098_02_s _ 201	7_9	-121.7058	18°	-121.70868

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Remove the wild weed growth from the waterside levee slope.



RD 2098 Unit 2 levee mile 5.30- 7.14 waterside levee slope and shoulder.

Photo 1 of 1: FA_2018_RD2098_246_8_20180925_00001.jpg

LM Start	5.48	Rating **	М	Issue No.		8
LM End	5.61	Issue Type +	e + Ma Location *			LS
Category Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End
Item	Vegetatio	n		38.27792	22°	38.279443°
пеш			-121.70769	98°	-121.709233 °	
DWR ID DWR_RD2098_02_s _ 2017_8						

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Remove the wild weed growth from the landside levee slope and berm.



RD 2098 Unit 2 Levee mile 5.30-7.14 wild growth on the landside slope.

LM Start	5.61	Rating **	М	Issue No.		6	
LM End	6.73	Issue Type +	Ма	Location *	WS		
Category	Earthen Levee			GPS Latitude/Longitude			
Category						End	
Item	Vegetatio	n		38.2794	43 °	38.292362 °	
пеш				-121.7092	33 °	-121.715995°	
DWR ID DWR_RD2098_02_f _ 2018_6					·		
	Comment Code						

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

* Location

LS : Land Side N/A : Not Applicable

WS : Water Side N/A : Not Applica

** Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated

C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	5.88	Rating **	М	Issue No. 11		11	
LM End	5.88	Issue Type +	Ма	Location *		WS	
Catagoria Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Erosion / I	Bank Caving		38.2829	46 °	38.282946°	
item				-121.71090	02°	-121.710902°	
DWR ID DWR_RD2098_02_s _ 2018_11							

Comment Code

E2 : Schedule repair of erosion site prior to the next inspection.

Inspector Comment

This waterside slump site is not new, and is somewhat protected by riprap and thick brushy vegetation, but it has the potential to erode into crown during high water with a strong south wind. It currently has a twofoot vertical scarp at the levee shoulder. It should be repaired.

Photo 1 of 1: FA_2018_RD2098_246_11_20180925_00004.jpg



Repair slumping on waterside slope.

LM Start	5.89	Rating **	M	Issue No.	13		
LM End	6.15	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Itom	Vegetatio	n		38.2830	53°	38.284662 °	
пеш	Item				10°	-121.715028°	
DWR ID DWR_RD2098_02_f _ 2018_13							
		_					

Comment Code

V1: Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

No Photos

LM Start	6.12	Rating **	M	Issue No.		12	
LM End	6.12	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		38.28434	18°	38.284348	0
item				-121.71468	32 °	-121.714682	0
DWR ID	DWR_RD2	098_02_f _ 201	6_12				
		Comn	nent Coo	le			

TR: Tree or limb

WS: Water Side

Inspector Comment

Remove this nut tree from the landside slope.

No Photos

* Location N/A: Not Applicable LS: Land Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	6.46	Rating **	A/W	Issue No.		15	
LM End	6.46	Issue Type +	Ma	Location *			
Category			GPS Latitude/Longitude				
Category				Start		End	
Item	2017 Stor	m Damage		38.2887	00°	38.288800°	
пеш				-121.7170	00°	-121.717000°	
DWR ID DWR_RD2098_02_f _ 2017_15						·	
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour of the lower and mid

waterside levee slope.

Site ID No:440

Site Designation:LMA-267 Repair Type: Erosion Rating: Area of Concern

Field Date:7/25/2017

Notes: Sloughing on waterside slope due to toe erosion.

		D :: ++			
LM Start	6.46	Rating **	A/W	Issue No.	15 (cont)
LM End	6.46	Issue Type +	Ma	Location *	





Photo 2 of 3: FA_2018_RD2098_246_15_20180925_00006.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	6.46	Rating **	A/W	Issue No. 15		15 (cont)
LM End	6.46	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory	Category					End
Item	2017 Stor	m Damage		38.2887	° 00	38.288800 °
пеш				-121.7170	00°	-121.717000°
DWR ID DWR_RD2098_02_f _ 2017_15						·
		Comn	nent Cod	de		

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour of the lower and mid

waterside levee slope.

Site ID No:440

Site Designation:LMA-267 Repair Type: Erosion Rating: Area of Concern Field Date:7/25/2017

Notes: Sloughing on waterside slope due to toe erosion.



LM Start	6.47	Rating **	A/W	Issue No.		17	
LM End	6.48	Issue Type +	Ma	Location *			
Catagory	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Stor	' Storm Damage		38.2889	00°	38.289000	0
пеш				-121.7170	00°	-121.717000	0
DWR ID	DWR_RD2	098_02_f _ 201	7_17				
		Comn	nent Coc	le			

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the lower and mid waterside levee slope.

Site ID No:441

Site Designation:LMA-268 Repair Type: Erosion Rating:Area of Concern Field Date:7/25/2017

Notes: Sloughing on waterside slope due to toe erosion.

Photo 1 of 3: FA_2018_RD2098_246_17_20180925_00008.jpg



N/A: Not Applicable LS: Land Side WS: Water Side

: Acceptable Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	6.47	Rating **	A/W	Issue No.		17 (cont)			
LM End	6.48	Issue Type +	Ma	Location *					
Catagony	Supplemental				GPS Latitude/Longitude				
Calegory	Category			Start		End			
Item	2017 Stor	m Damage		38.2889	00°	38.289000°			
пеш				-121.7170	00°	-121.717000°			
DWR ID	DWR_RD2098_02_f _ 2017_17								
	Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the lower and mid waterside levee slope.

Site ID No:441

Site Designation:LMA-268 Repair Type: Erosion Rating: Area of Concern Field Date:7/25/2017

Notes: Sloughing on waterside slope due to toe erosion.

LM Start	6.47	Rating **	A/W	Issue No.	17 (cont)
LM End	6.48	Issue Type +	Ма	Location *	





Photo 3 of 3: FA_2018_RD2098_246_17_20180925_00010.jpg



A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	6.48	Rating **	М	Issue No.		7	
LM End	6.74	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.289080 °		38.292467 °	
пеш				-121.7168	52 °	-121.716140°	
DWR ID	DWR_RD2	098_02_f _ 201	7_7				
	Comment Code						
V2 : Remove the wild growth other than native grasses from the levee slopes.							

Inspector Comment

No Photos

Rating ** A/W Issue No. 6.64 LM Start 18 6.65 Issue Type + Location * LM End Supplemental GPS Latitude/Longitude Category Start End 2017 Storm Damage 38.291300° 38.291400° Item -121.716100° -121.716000° DWR_RD2098_02_f _ 2017_18 DWR ID

Inspector Comment

Comment Code

Levee Evaluation Comments

Description: The damage consists of scour, cracking, instability, and sloughing of the waterside levee slope.

Site ID No:442

Site Designation:LMA-269 Repair Type: Erosion Rating:Serious Field Date:7/25/2017

Notes: Two sloughing sections along waterside slope due to toe erosion.

Photo 1 of 3: FA_2018_RD2098_246_18_20180925_00011.jpg



LS: Land Side WS: Water Side

N/A: Not Applicable

A: Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ob : Design & System Obsolescence

Ma : Maintenance Deficiancy

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	6.64	Rating **	A/W	Issue No.	18 (cont)	
LM End	6.65	Issue Type +	Ма	Location *		
Supplemental				GPS La	atitud	le/Longitude
Calegory	Category			Start		End
Item	2017 Stor	m Damage		38.2913	00°	38.291400°
пеш				-121.7161	00°	-121.716000°
DWR ID DWR_RD2098_02_f _ 2017_18						
	Comment Code					

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour, cracking, instability, and sloughing of the waterside levee slope.

Site ID No:442

Site Designation:LMA-269 Repair Type: Erosion Rating:Serious Field Date:7/25/2017

Notes: Two sloughing sections along waterside slope due to toe erosion.

LM Start	6.64	Rating **	A/W	Issue No.	18 (cont)
LM End	6.65	Issue Type +	Ma	Location *	

Photo 2 of 3: FA_2018_RD2098_246_18_20180925_00012.jpg



Photo 3 of 3: FA_2018_RD2098_246_18_20180925_00013.jpg



A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	6.71	Rating **	М	Issue No.		22
LM End	6.71	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	38.29219	4°	38.292194°
пеш			-121.71585	3°	-121.715853°	
DWR ID	20976					

Inspector Comment

Comment Code

FS_ID:33784 DS_ID:20976 EP_NO: 10172

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 03/18/2014 Headwalls on WS toe failing at outlet. It is unclear if these were permanent installations or something that was

installed as a temporary fix. (W. Wylie - DWR UCIP)
FIELD_STRUCT_DESC: 1 of 2: 48-inch corrugated metal drainage pipe through the levee, 29 feet below the crown. Two slide gates in a 7-footdiameter corrugated metal pipe (CMP) riser on the waterside (WS) slope. (two 48-inch [HLM 6.75] authorized under Automatic Board Order (ABO) issued as Permit No. 10172, 1974 - Moresco Brothers). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 6.75)].

FS Date: 3/18/2014

LM Start	6.71	Rating **	М	Issue No.	22 (cont)
LM End	6.71	Issue Type +	Ма	Location *	

Photo 1 of 3: UCIP_FA_2018_33784_61162.jpg



Two slide gates in 7-foot diameter CMP riser on waterward slope.

Photo 2 of 3: UCIP_FA_2018_33784_61161.jpg



Inlet not visible on LS toe.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	6.71	Rating **	М	Issue No.		22 (cont)
LM End	6.71	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	nsibility	38.29219	4 °	38.292194°
пеш			-121.71585	3°	-121.715853°	
DWR ID	20976					

Inspector Comment

Comment Code

FS_ID:33784 DS_ID:20976 EP_NO: 10172

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 03/18/2014 Headwalls on WS toe failing at outlet. It is unclear if these were permanent installations or something that was installed as a temporary fix. (W. Wylie - DWR UCIP)

FIELD_STRUCT_DESC: 1 of 2: 48-inch corrugated metal drainage pipe through the levee, 29 feet below the crown. Two slide gates in a 7-foot-diameter corrugated metal pipe (CMP) riser on the waterside (WS) slope. (two 48-inch [HLM 6.75] authorized under Automatic Board Order (ABO) issued as Permit No. 10172, 1974 - Moresco Brothers). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento

O&M Manual 109, April 1962, (HLM 6.75)].

FS Date: 3/18/2014



View inside CMP riser on WS shoulder.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	6.72	Rating **	М	Issue No.		23
LM End	6.72	Issue Type +	Ма	Location *		
Category	Supplemental			GPS Latitude/Longitude		
Calegory		Start		End		
Item	DWR UCI	P LMA Respo	nsibility	38.29223	4 °	38.292234°
пеш				-121.71587	5°	-121.715875°
DWR ID	20961					

Inspector Comment

Comment Code

FS_ID:32285 DS_ID:20961 EP_NO: 10172

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 03/18/2014 Headwalls at WS toe failing. It is uncertain if these retaining walls were a permanent fixture or a

temporary fix that failed. (W. Wylie - DWR UCIP)

FIELD_STRUCT_DESC: 2 of 2: 48-inch corrugated metal drainage pipe through the levee, 29 feet below the crown. Two slide gates in a 7-foot-diameter corrugated metal pipe (CMP) riser on the waterside (WS) slope. (two 48-inch pipes [HLM 6.75] authorized under Automatic Board Order (ABO) issued as Permit No. 10172, 1974 - Moresco Brothers). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 6.75)].

FS Date: 3/18/2014

LM Start	6.72	Rating **	М	Issue No.	23 (cont)
LM End	6.72	Issue Type +	Ma	Location *	

Photo 1 of 3: UCIP_FA_2018_32285_58749.jpg



Inlet not visible on LS toe.

Photo 2 of 3: UCIP_FA_2018_32285_58748.jpg



7-foot diameter CMP riser with two slide gates inside.

Page 10 of 16

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	6.72	Rating **	М	Issue No.		23 (cont)	
LM End	6.72	Issue Type +	Ma	Location *			
Category	Suppleme	ental		GPS Lat	ituc	le/Longitude	
Calegory				Start		End	
Itom	DWR UCI	IP LMA Respo	onsibility	38.29223	4 °	38.292234	0
Item			-121.71587	5°	-121.715875	0	
DWR ID	20961						

Comment Code

Inspector Comment

FS ID:32285 DS_ID:20961 EP_NO: 10172

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 03/18/2014 Headwalls at WS toe failing. It is uncertain if these retaining walls were a permanent fixture or a

temporary fix that failed. (W. Wylie - DWR UCIP)

FIELD_STRUCT_DESC: 2 of 2: 48-inch corrugated metal drainage pipe through the levee, 29 feet below the crown. Two slide gates in a 7-footdiameter corrugated metal pipe (CMP) riser on the waterside (WS) slope. (two 48-inch pipes [HLM 6.75] authorized under Automatic Board Order (ABO) issued as Permit No. 10172, 1974 - Moresco Brothers). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 6.75)].

FS Date: 3/18/2014



7-foot diameter CMP riser with two slide gates inside.

LM Start	6.74	Rating **	М	Issue No.		19
LM End	6.75	Issue Type + Ma		Location *		LS
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	2017 Stor	m Damage		38.2925	00°	38.292600°
пеш			-121.7161	00°	-121.716200°	
DWR ID	DWR RD2	098 02 f 201	7 19			

Comment Code

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the

landside levee slope.

Site ID No:443

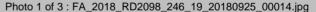
Site Designation:LMA-270

Repair Type: Stability

Rating:Area of Concern

Field Date:7/25/2017

Notes: Sloughing on crown into upper portion of landside levee slope.





N : Not Inspected/Rated C : Corrected

Ma: Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	6.74	Rating **	М	Issue No.	19 (cont)		
LM End	6.75	Issue Type +	Ma	Location *		LS	
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	2017 Storm Damage			38.2925	00°	38.292600°	
пеш				-121.716100 °		-121.716200°	
DWR ID	DWR ID DWR_RD2098_02_f _ 2017_19						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the

landside levee slope.

Site ID No:443

Site Designation:LMA-270 Repair Type: Stability Rating: Area of Concern Field Date:7/25/2017

Notes: Sloughing on crown into upper portion of landside levee slope.

LM Start	6.74	Rating **	М	Issue No.	19 (cont)
LM End	6.75	Issue Type +	Ma	Location *	LS

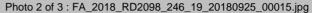




Photo 3 of 3: FA_2018_RD2098_246_19_20180925_00016.jpg



N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	6.77	Rating **	М	Issue No.	20		
LM End	6.80	Issue Type +	Ma	Location *	LS		
Category				GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	2017 Storm Damage			38.2929	00°	38.293000°	
пеш				-121.7166	00°	-121.717000°	
DWR ID	DWR_RD2						
Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of cracking of the levee crest.

Site ID No:444

Site Designation:LMA-271 Repair Type: Erosion Rating:Area of Concern Field Date:7/25/2017

Notes: Two combined sloughing locations (271 and 272) within levee crown into waterside and landside slopes. Sloughing on landside slope

bulges into ditch at toe.



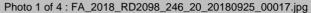




Photo 2 of 4: FA_2018_RD2098_246_20_20180925_00018.jpg



+ Issue Type
Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	6.77	Rating **	М	Issue No.		20 (cont)
LM End	6.80	Issue Type +	Ма	Location *	LS	
Category	Suppleme	ental		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	2017 Stor	2017 Storm Damage			00°	38.293000°
пеш				-121.7166	00°	-121.717000°
DWR ID	DWR_RD2098_02_f _ 2017_20					
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of cracking of the levee crest.

Site ID No:444

Site Designation:LMA-271 Repair Type: Erosion Rating:Area of Concern Field Date:7/25/2017

Notes: Two combined sloughing locations (271 and 272) within levee crown into waterside and landside slopes. Sloughing on landside slope

bulges into ditch at toe.

LM Start	6.77	Rating **	М	Issue No.	20 (cont)
LM End	6.80	Issue Type +	Ma	Location *	LS

Photo 3 of 4: FA_2018_RD2098_246_20_20180925_00019.jpg



Photo 4 of 4: FA_2018_RD2098_246_20_20180925_00020.jpg



10/26/17: Notice depression in crown road and slumping toward the left/landside (bulge at toe of levee).

N : Not Inspected/Rated C : Corrected + Issue Type
Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	7.24 Rating ** A/W		A/W	Issue No.		25
LM End	7.24	Issue Type +	Ма	Location *		
Category	Suppleme	Supplemental				le/Longitude
Calegory			Start		End	
Item	DWR UCI	P LMA Respo	nsibility	38.29374	1°	38.293741 °
пеш			-121.72478	7 °	-121.724787 °	
DWR ID	20978					·

Inspector Comment

Comment Code

FS_ID:32303 DS_ID:20978 EP_NO: 10171

Repair Type: No Action Needed Crossing Status: Found

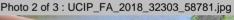
UCIP Comments: 09/14/2017 Permit review indicates this 24-inch pipe was authorized as an irrigation and drainage pipe under ABO issued as Permit No. 10171, structure description was updated. Structure type logged as drainage. (DWR UCIP - O. Magana)

FIELD_STRUCT_DESC: *ABANDONED* 24-inch steel dual-purpose irrigation and drainage pipe through the levee, 4.5 feet below the crown. Corrugated metal cutoff wall around the pipe. Pipe has welded steel plate over end on the landside (LS) slope and is not visible on the waterside (WS) slope. (24-inch pipe [HLM 7.23] authorized under Automatic Board Order (ABO) issued as Permit No. 10171, 1974 - Glenn A. Bowlsbey). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 7.28)]. FS Date: 3/18/2014 7:07:14 AM





Pipe visible under new pipe on LS slope.





Pipe visible under new pipe on LS slope.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cache Slough	Left	1.89	10/18/2018 10/18/2018	David Julian

LM Start	7.24 Rating ** A/W		Issue No.		25 (cont)		
LM End	7.24	Issue Type +	Ма	Location *	Location *		
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory	Category				Start		
Item	DWR UCI	P LMA Respo	nsibility	38.29374	۱°	38.293741	0
пеш		-121.72478	7 °	-121.724787	0		
DWR ID	20978						

Inspector Comment

Comment Code

FS_ID:32303 DS_ID:20978 EP_NO: 10171

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 09/14/2017 Permit review indicates this 24-inch pipe was authorized as an irrigation and drainage pipe under ABO issued as Permit No. 10171, structure description was updated. Structure type logged as drainage. (DWR UCIP - O. Magana)

FIELD_STRUCT_DESC: *ABANDONED* 24-inch steel dual-purpose irrigation and drainage pipe through the levee, 4.5 feet below the crown. Corrugated metal cutoff wall around the pipe. Pipe has welded steel plate over end on the landside (LS) slope and is not visible on the waterside (WS) slope. (24-inch pipe [HLM 7.23] authorized under Automatic Board Order (ABO) issued as Permit No. 10171, 1974 - Glenn A. Bowlsbey). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 7.28)].

FS Date: 3/18/2014 7:07:14 AM



Welded steel cap over LS end of pipe.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/18/2018 10/18/2018	David Julian

LM Start	7.19	Rating **	Α	Issue No.	2		
LM End	7.31	Issue Type +	Ма	Location *	LS		
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory				Start		End	
Item	Vegetatio	n		38.29317	'8°	38.294705°	
пеш				-121.72422	20°	-121.725130°	
DWR ID	DWR_RD2098_03_f _ 2016_2						
Comment Code							

 $\ensuremath{\text{V2}}$: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Landside vegetation is acceptable; continue to maintain.

LM Start	7.19	Rating **	Α	Issue No.	2 (cont)
LM End	7.31	Issue Type +	Ma	Location *	LS

Photo 1 of 2: FA_2018_RD2098_247_2_20180925_00004.jpg



RD 2098 Looking downstream from levee mile 7.19-7.31

Photo 2 of 2: FA_2018_RD2098_247_2_20180925_00005.jpg



RD 2098 Looking downstream from levee mile 7.19 landside slope.

LM Start	7.19	Rating **	Α	Issue No.		8	
LM End	7.31	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	tituc	le/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.2931	78°	38.294705°	
item				-121.7242	15°	-121.725133 °	
DWR ID	DWR_RD2	098_03_f _ 201	6_8				
		Comn	nent Cod	de			
V2 : Remo slopes.	ve the wild	d growth other	than na	tive grasses	fro	m the levee	
Inspector Comment							
Waterside vegetation is acceptable; continue to maintain.							



RD 2098 Unit 3 levee mile 7.19-7.31 waterside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/18/2018 10/18/2018	David Julian

LM Start	7.33 Rating ** M		Issue No.		7		
LM End	7.72	Issue Type +	Ма	Location *	ı* WS		
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item		CE Erosion S	Survey,	38.294858	3°	38.299606	٥
пеш	DRAFT			-121.725433	3°	-121.728621	0
DWR ID	DWR_RD2098_03_f _ 2018_7						

Comment Code

Inspector Comment

2017 Site ID: HAS 7.9 L

Status: Eroding

2017 Field Notes: deep cracks along bank and toe, intermittent slump. Site History: 2011 - Large vertical erosion pockets and bank slumping.

Photo 1 of 1 : FA	2018	RD2098	247	11	20181019	00022 ina

No Photos



View looking upstream of acceptable vegetation on the water side slope (October 2018).

Photo 1 of 3: FA_2018_RD2098_247_1_20180925_00001.jpg

7.37 Rating ** Issue No. Α LM Start 11 Issue Type + Location * WS LM End 8.22 Earthen Levee GPS Latitude/Longitude Category Start Fnd Vegetation 38.295418° 38.305932° Item -121.725657° -121.730000° DWR_RD2098_03_f _ 2016_11 DWR ID

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Waterside vegetation is acceptable; continue to maintain.

LM Start	7.51	Rating **	M	Issue No.		1			
LM End	7.51	Issue Type +	Ma	Location *		LS			
Category	evee	GPS Latitude/Longitude							
Category				Start		End			
Item	Slope Sta	bility		38.2968	46°	38.296846 °			
пеш				-121.7275	46 °	-121.727546 °			
DWR ID DWR_RD2098_03_f _ 2016_1									

Comment Code

S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.

Inspector Comment

Make the repairs to the erosion site listed.



Close up. Looking upstream.

* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

** Rating

A : Acceptable N : Not Inspected/Rated M: Minimally Acceptable CR : Corrected U: Unacceptable A/W : Acceptable but Monitor & Maintain

** Rating

A : Not Applicable M: Not Inspected/Rated M: Minimally Acceptable D: C: Corrected Ob: Design & System Obsolescence En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/18/2018 10/18/2018	David Julian

		D // ++						
LM Start	7.51	Rating **	М	Issue No.	1 (cont)			
LM End	7.51	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Slope Sta	bility		38.2968	46°	38.296846°		
пеш				-121.7275	46°	-121.727546°		
DWR ID	DWR_RD2	098_03_f _ 201	6_1					
		Comn	nent Cod	de				
S2 : Repai where pos		slope damag	ed by fo	ot traffic an	d pr	event access		
		Inspecto	or Comm	nent				
Make the r	epairs to t	he erosion site	e listed.					

LM Start	7.51	Rating **	М	Issue No.	1 (cont)
LM End	7.51	Issue Type +	Ma	Location *	LS



Erosion site on 03/15/18.

Photo 3 of 3: FA_2018_RD2098_247_1_20180925_00003.jpg



Looking downstream.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/18/2018 10/18/2018	David Julian

LM Start	7.61	Rating **	М	Issue No.		10	
LM End	7.62	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory	egory					End	
Item	2017 Stor	m Damage		38.29790	00°	38.298100°	
пеш				-121.72890	00°	-121.728900°	
DWR ID	R ID DWR_RD2098_03_f _ 2017_10						
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of sloughing of the lower and mid

waterside levee slope.

Site ID No:449

Site Designation:LMA-276 Repair Type: Erosion

Rating: Area of Concern Field Date:7/27/2017

Notes: Sloughing on waterside slope due to erosion at waterside toe.

LM Start	7.61	Rating **	М	Issue No.	10 (cont)
LM End	7.62	Issue Type +	Ma	Location *	

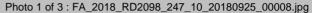




Photo 2 of 3: FA_2018_RD2098_247_10_20180925_00009.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/18/2018 10/18/2018	David Julian

LM Start	7.61	Rating **	М	Issue No.	No. 10 (cont)		
LM End	7.62	Issue Type +	Ma	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory	tegory					End	
Item	2017 Stor	m Damage		38.2979	00°	38.298100°	
пеш				-121.7289	00°	-121.728900°	
DWR ID	VR ID DWR_RD2098_03_f _ 2017_10						
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of sloughing of the lower and mid waterside levee slope.

Site ID No:449

Site Designation:LMA-276 Repair Type: Erosion Rating: Area of Concern Field Date:7/27/2017

Notes: Sloughing on waterside slope due to erosion at waterside toe.



LM Start	7.63	Rating **	М	Issue No.	13			
LM End	7.64	Issue Type +	Ма	Location *				
Category Supplemental				GPS Latitude/Longitude				
				Start		End		
Item	2017 Stor	m Damage		38.29830	0°	38.298400	0	
item				-121.72880	0°	-121.728800	0	
DWR ID	DWR_RD2	098_03_f _ 201	7_13					
	Comment Code							

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the

waterside levee slope.

Site ID No:450

Site Designation:LMA-277 Repair Type: Erosion Rating:Area of Concern Field Date:7/27/2017

Notes: Sloughing on waterside due to waterside toe erosion.





LS: Land Side WS: Water Side

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/18/2018 10/18/2018	David Julian

LM Start	7.63	Rating **	М	Issue No.	13 (cont)		
LM End	7.64	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory		Start		End			
Item	2017 Stor	m Damage		38.29830	00°	38.298400°	
пеш				-121.72880	00°	-121.728800 °	
DWR ID	VR ID DWR_RD2098_03_f _ 2017_13						
	Comment Code						

Inspector Comment

Levee Evaluation Comments

Description: The damage consists of scour and sloughing of the

waterside levee slope.

Site ID No:450

Site Designation:LMA-277 Repair Type: Erosion Rating: Area of Concern

Field Date:7/27/2017 Notes: Sloughing on waterside due to waterside toe erosion.

LM Start	7.63	Rating **	М	Issue No.	13 (cont)
LM End	7.64	Issue Type +	Ma	Location *	

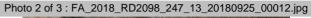




Photo 3 of 3: FA_2018_RD2098_247_13_20180925_00013.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/18/2018 10/18/2018	David Julian

LM Start	7.66	Rating **	М	Issue No.		15
LM End	7.68	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory	Sategory					End
Item	2017 Stor	m Damage		38.2987	00°	38.299000°
пеш						-121.728600 °
DWR ID	DWR_RD2	098_03_f _ 201				
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:The damage consists of scour and sloughing of the lower and mid waterside levee slope.

Site ID No:451

Site Designation:LMA-278 Repair Type: Erosion Rating:Area of Concern

Field Date:7/27/2017 Notes: Sloughing on waterside slope due to watwrside toe erosion.

LM Start	7.66	Rating **	М	Issue No.	15 (cont)
LM End	7.68	Issue Type +	Ma	Location *	



Photo 2 of 3: FA_2018_RD2098_247_15_20180925_00015.jpg



Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/18/2018 10/18/2018	David Julian

LM Start	7.66	Rating **	М	Issue No.	15 (cont)	
LM End	7.68	Issue Type +	Ма	Location *		
Category			GPS Latitude/Longitude			
Calegory	ategory					End
Item	2017 Stor	m Damage		38.2987	00°	38.299000°
пеш						-121.728600 °
DWR ID	DWR_RD2	D2098_03_f _ 2017_15				
Comment Code						

Inspector Comment

Levee Evaluation Comments

Description:The damage consists of scour and sloughing of the lower and mid waterside levee slope.

Site ID No:451

Site Designation:LMA-278 Repair Type: Erosion Rating:Area of Concern

Field Date:7/27/2017

Notes: Sloughing on waterside slope due to watwrside toe erosion.



LM Start	7.87	Rating **	М	Issue No.		9	
LM End	7.87	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	zategory					End	
Item	Encroach	ments		38.3017)7°	38.301707°	
item				-121.7280	45 °	-121.728045 °	
DWR ID	VR ID DWR_RD2098_03_s _ 2014_9						
Comment Code							

TR : Tree or limb

Inspector Comment

Remove the fallen tree limb from the water side slope.

Photo 1 of 1: FA_2018_RD2098_247_9_20181019_00023.jpg

View of fallen tree limb on the water side slope (October 2018).

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/18/2018 10/18/2018	David Julian

LM Start	8.05	Rating **	М	Issue No.		12
LM End	8.34	Issue Type +	Ma	Location *		WS
Category	Suppleme	GPS La	atitud	le/Longitude		
Category		Start		End		
Item		CE Erosion S	Survey,	38.3042	78°	38.306705°
пеш	DRAFT			-121.7279	60°	-121.732014°
DWR ID	DWR_RD2098_03_f _ 2018_12					
Comment Code						

No Photos

Inspector Comment

2017 Site ID: HAS 8.4 L Status: Eroding New

2017 Field Notes: Horizontal cracks; scour along toe; poorly

constructed levee susceptible to erosion.

Site History:

LM Start	8.07	Rating **	A/W	Issue No.		5		
LM End	8.07	Issue Type +	Ma	Location *		WS		
Category	Earthen Levee			GPS La	atitud	e/Longitude		
Calegory	Category					End		
Item	Cracking	Cracking			53°	38.304553°		
пеш			-121.7278	53°	-121.727853°			
DWR ID	DWR_RD2098_03_f _ 2018_5							

Comment Code

CR1: Monitor and have inspected by geotechnical engineer.

Inspector Comment

Cracks in waterside shoulder parallel to levee should be monitored for additional movement. Currently up to 2 inchs wide and 50 feet long. Probed to 3.5 feet deep. Up to 1 inch of vertical offset observed on 10/26/17. No change as of 03/15/18.

Photo 1 of 1: FA_2018_RD2098_247_5_20180925_00006.jpg



View upstream of cracks in waterside shoulder.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/18/2018 10/18/2018	David Julian

LM Start	8.16	Rating **	A/W	Issue No.	. 17		
LM End	8.16	Issue Type +	Ма	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P LMA Respo	nsibility	38.3054	62 °	38.305462°	
item				-121.7288	31 °	-121.728881 °	
DWR ID	ID 20981						
Comment Code							

Inspector Comment

FS_ID:51453 DS_ID:20981 EP_NO: 10174

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 12/22/2016 Crossing has been downgraded from Urgent to No Action Needed walkways on both WS and LS have been rebuilt and the WS gate has been upgraded to stainless steel where previous corrodable material was present. (O. Magana - DWR UCIP)03/19/2014 Current walkway to slidegate on WS toe does not provide safe access to operate slidegate. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 36-inch steel dual-purpose irrigation and drainage pipe through the levee, 26 feet below the crown. Two corrugated metal cutoff walls around the pipe. Walkway to the slide gate on the waterside (WS) end. Combination slide and flap gate on the landside (LS) end. 48-inch corrugated metal pipe (CMP) riser and an adjoining pump on a metal pier at the LS toe. (36-inch pipe [HLM 8.20] authorized under Automatic Board Order (ABO) issued as Permit No. 10174, 1974 - Glen A. Bowlsbey). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 8.20)].

FS Date: 12/22/2016

LM Start	8.16	Rating **	A/W	Issue No.	17 (cont)
LM End	8.16	Issue Type +	Ма	Location *	



Walkway has been re-built, photo 1 of 2.



Walkway has been re-built, photo 2 of 2.

* Location
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

** Rating
A: Acceptable N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
C: Corrected Ob: Design & System Obsolescence
U: Unacceptable A/W: Acceptable but Monitor & Maintain

** Rating
A: Acceptable M: N: Not Inspected/Rated M: Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/18/2018 10/18/2018	David Julian

LM Start	8.16	Rating **	A/W	Issue No.		17 (cont)		
LM End	8.16	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Category			Start		End			
Item	DWR UCIP LMA Responsibility			38.3054	62 °	38.305462°		
item				-121.7288	31 °	-121.728881 °		
DWR ID 20981								

Inspector Comment

Comment Code

FS_ID:51453 DS_ID:20981 EP_NO: 10174

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 12/22/2016 Crossing has been downgraded from Urgent to No Action Needed walkways on both WS and LS have been rebuilt and the WS gate has been upgraded to stainless steel where previous corrodable material was present. (O. Magana - DWR UCIP)03/19/2014 Current walkway to slidegate on WS toe does not provide safe access to operate slidegate. (W. Wylie - DWR UCIP) FIELD_STRUCT_DESC: 36-inch steel dual-purpose irrigation and drainage pipe through the levee, 26 feet below the crown. Two corrugated metal cutoff walls around the pipe. Walkway to the slide gate on the waterside (WS) end. Combination slide and flap gate on the landside (LS) end. 48-inch corrugated metal pipe (CMP) riser and an adjoining pump on a metal pier at the LS toe. (36-inch pipe [HLM 8.20] authorized under Automatic Board Order (ABO) issued as Permit No. 10174, 1974 - Glen A. Bowlsbey). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 8.20)].





View of levee crown at pipe crossing.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Haas Slough	Right	1.94	10/18/2018 10/18/2018	David Julian

LM Start	8.35	Rating **	A/W	Issue No.		18		
LM End	8.35	Issue Type +	Ма	Location *				
Category	Supplemental				GPS Latitude/Longitude			
Calegory	liegory					End		
Item	DWR UCIP LMA Responsibility			38.3069	16°	38.306916°		
пеш				-121.73198	84 °	-121.731984°		
DWR ID	DWR ID 20962							
Comment Code								

Inspector Comment

FS_ID:32384 DS_ID:20962 EP_NO: 10174

Repair Type: No Action Needed Crossing Status: Found UCIP Comments:

FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 25.5 feet below the crown. Walkway to the slide gates at both ends of the pipe. (Permit No. 1607, 1951 - R. F. Moore and Lorraine W. Zanetti. This pipe was retained under Automatic Board Order (ABO) issued as Permit No. 10174, 1974 - Glen A. Bowlsbey). [Additional Reference(s): DWR Levee Log, 2003. USACE Sacramento O&M Manual 109, April 1962, (HLM 8.40)].

FS Date: 3/19/2014

LM Start	8.35	Rating **	A/W	Issue No.	18 (cont)
LM End	8.35	Issue Type +	Ма	Location *	

Photo 1 of 2 : UCIP_FA_2018_32384_58883.jpg

Slide gate at LS toe.

Photo 2 of 2: UCIP_FA_2018_32384_58882.jpg



Walkway with slide gate on WS toe.

Page 1 of 2

Flood Control Project Maintenance Levee Inspections

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	10/18/2018 10/18/2018	David Julian

LM Start	9.44	Rating **	М	Issue No.		9	
LM End	9.74	Issue Type +	Ma	Location *		WS	
Category	Suppleme	GPS Latitude/Longitude					
Category				Start		End	
Item	2017 USACE Erosion Survey,			38.3202	40°	38.324587°	
пеш	DRAFT			-121.7401	83°	-121.740254°	
DWR ID DWR_RD2098_04_f _ 2018_9							
Comment Code							

Inspector Comment

2017 Site ID: HAS 9.7 L

Status: Critical

2018: Some erosion about a third to half way up the slope the whole length. A couple pockets of deeper erosion into the slope. I would mark as unacceptable (Djulian).

2017 Field Notes: Upgraded to CRITICAL. Multiple slump on top of old slumping; slump is into levee prisim.

Site History: 2011 - Several scallops of erosion. Erosion primarily due to the weight of cattle on the slope. 2016 - Two new large scallop pockets in the middle of the site.

LM Start	9.68	Rating **	A/W	Issue No.		8	
LM End	9.73	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS Latitude/Longitude			
Category	Category					End	
Item	Erosion / Bank Caving			38.3237	49°	38.324467 °	
пеш				-121.7401	48 °	-121.740155 °	
DWR ID DWR_RD2098_04_s _ 2014_8							
Comment Code							

E1: Note and monitor erosion site.

Inspector Comment

Several areas of scalloped erosion at waterside toe. Should be monitored.

No Photos



Several areas of scalloped erosion at waterside toe. Largest area is visible in distance in this photo.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2018

Reclamation District No. 2098 Cache and Haas Slough

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 04 Back Levee	Left	2.95	10/18/2018 10/18/2018	David Julian

LM Start	10.02	Rating **	A/W	Issue No.		17	
LM End	10.02	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	Category					End	
Item	Slope Stability			38.328368 °		38.328438°	
пеш			-121.7406	17°	-121.740612°		
DWR ID DWR_RD2098_04_s _ 2017_17							
Comment Code							
S2 : Repair the levee slope damaged by foot traffic and prevent access							

where possible.

Inspector Comment

Sloughing landside slope has been temporarily repaired at this specific location, but this area shows cracks along shoulder and should continue to be monitored.

Photo 1 of 1: FA_2018_RD2098_248_17_20180925_00002.jpg



Slumping landside slope should be monitored and repaited as needed.

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence